

during the next *spring*, I concluded that they must hibernate thus, in flocks, laying a portion of their eggs in the fall, and the rest during the following spring. I think the mouldy skeletons must be those of moths who were unable to withstand the winter, and died clinging to the bark, for in the spring there were some just beginning to mould, and others in various stages of decomposition.

Roland Thaxter.

BIBLIOGRAPHICAL RECORD.

Authors and Societies are requested to forward their works to the Editor at the earliest date possible. We ask our readers to inform us of the publication especially of those works which are not generally consulted by entomologists.

B. Pickman Mann.

(Continued from page 104.)

* 248. The **Nat. Can.** [see Rec., Nos. 27-32], vol. vi, from p. 193, contains the following, and Nos. 249 to 254, all, as before, presumably by the Editor, l'Abbé L. Provancher.

a. Ravages of locusts at Portneuf checked by crows, p. 255. *b.* Announcement of an exhibition of insects to take place at Paris, Sept. 6-30, 1874, p. 268. *c.* Notice of Loew's Monographs of the Diptera of North America, vol. iii (1873), p. 269. *d.* Obituary notice of Mr. G. R. Croteh, p. 269. *e.* Abundance of insects in Canada this year, p. 272.

* 249. Les Ichneumonides de Québec avec description de plusieurs espèces nouvelles. (suite.) [See Rec., No. 28.] p. 200-205; p. 279-285; p. 298-301; p. 331-336.

Describes 12 (10 n.) spp. *Cryptus*, 16 n. spp. and genus *Phygadeuon*, 3 n. spp. *Mesochorus*, 4 n. spp. *Mesostenus*, 9 n. spp. *Hemiteles*, 3 (1 n.) spp. *Trogus*, 1 n. sp. *Joppa*; synopsis of the species in each genus; enumerates 58 spp.

* 250. Une Excursion à Montréal. p. 215-224.

Telyphonus giganteus from Florida; ravages of *Clisiocampa sylvatica*; abundance of *Macronema zebratum*; lists of 57 species collected.

* 251. Larves de Diptères sur un corps humain. p. 264-266; p. 319.

Ten young Tachinid (?) larvæ in the subcutaneous tissue of a baby; citation of similar cases.

* 252. Insectes nommés. p. 266-268.

Lepisma sp. from a well 107 feet deep.

* 253. Les Sauterelles. p. 270.

Excellence of locusts as human food.

* 254. Vers à soie d'Amérique. L'Attaque Polyphème. *Attacus Polyphemus* Liuné. p. 302-319, fig. 9-11, with one plate (ii).

Description; habits; enemies; availability for the production of silk. Enumeration of American silkworms. Experiments made with it, and directions for its cultivation [from Amer. Nat., vol. i (by Mr. Trouvelot)]; offers of assistance to would-be experimenters.

* 255. The **Mass. Ploughm.** [see Rec., Nos. 33-38], vol. xxxiii, from No. 40 (1704) contains the following.

a. The Luna Moth.—*Attacus Luna* [fig., description (from Harris)], No. 41 (1705). b. Increase of Noxious Insects [habits and ravages of, and means against *Clisiocampa americana*], No. 42 (1706). c. The Cranberry Worm [habits of ——— ? and of an onion cutworm], No. 42 (1706). d. Appearance of *Doryphora 10-lineata* near Boston [Doubtful. *B. P. M.*], No. 43 (1707). e. Damage to the wheat crops by insects, No. 44 (1708). f. Diseased Squash Vines [ravages of *Aegeria cucurbitae*], No. 45 (1709). g. The Onion Midget [copied from Rec., No. 238], No. 46 (1710).

* 256. The **Mass. Ploughm.**, vol. xxxiv, as far as No. 20 (1735), contains the following, and No. 257.

a. Eggs of the Bee Moth [description of eggs and egg-laying of *Galleria cereana*], No. 6 (1722). b. Agricultural Ants [habits of *Myrmica molefaciens* (from Amer. Nat., vol. viii; see Rec., No. 272)], No. 8 (1724). c. The Work of Insects [commercial value of various insects and insect products], No. 8 (1724). d. Destitution in Nebraska [extent of ravages by locusts], No. 8 (1724).

* 257. *Omaha Herald*, Dec. 22. The Rocky Mountain Grasshopper. No. 14 (1730).—Also reprinted in Boston Daily Advertiser, vol. cxxiv, No. 154 (18, 723), Dec. 30, 1874.

Habits, habitat and habitus of *Caloptenus spretus*.

* 258. The **Proc. Acad. Nat. Sci. Philad.** for 1874 [see Rec., No. 40], contain the following, and Nos. 259 to 261.

Statement of work done on the entomological library and collections of the Society, pp. 229, 231.

* 259. PROF. JOSEPH LEIDY. On a Parasitic Worm of the House-fly. p. 139-140.

Filaria (Habronema) muscae living frequently in the proboscis of the common house-fly. [The occurrence of such a parasite was pointed out by Mr. F. G. Sanborn in Nov. 1873, at a meeting of the Entomological Section of the Boston Society of Natural History.]

* 260. J. LEIDY. Note on *Dryocampa*. p. 160.

Devastation of oaks in the forests of New Jersey by *Dryocampa senatoria*; affection of the *Dryocampa* by the fungus *Achlya proliferata*.

* 261. A. R. GROTE. New species of North American Noctuidæ. p. 197-214.

Describes *Acronyeta exilis*, *A. paupercula*, *Eutotype* (n. g.) *Rolandii*, *Dianthoecia pensilis*, *Gortyna cerina*, *Himella* (n. g.) *fidelis*, *H. furfurata*, *Taenioecampa capsella*, *Agrotis innotabilis*, *A. euroides*, *A. Bostoniensis*, *Hadena* sub-gen. *Oligia*, *H. (O.) versicolor*, *H. (O.) tracta*, *Apamea purpuripennis*, *Pseudorthosia pectinata*, *Plusia labrosa*, *P. epigaea*, *Scopelosoma devia*, *Calocampa cineritia*, *Pyrrhia illiterata*, *Tamila tertia*, *Homopyralis* (n. g.) *tactus*, *H. tantillus* = 3 n. gen., 23 n. spp.; describes *Helotropha reniformis* var. *atra* n. var.; republishes Linne's description of "*Phalaena Omicron*" = ? *Plusia simplex*; notes on *Apamea* and *Scopelosoma*, with list of species; on *Agrotis badinodis*, *A. geniculata*, *Melaporphyria immortua*, *Hydroecia*, *Calocampa* spp.

The **Proc. Acad. Nat. Sci. Philad.** for 1875, as far as p. 152, contain Nos. 262, 263.

* 262. T. G. GENTRY. Curious Anomaly in History of certain Larvæ of *Acronyeta obliquata*, Guenee, and Hints on Phylogeny of Lepidoptera. p. 25-54.

Abundance of larvæ of *Vanessa Antiopa* and *Acronyeta obliquata*; habits of the latter; effect of environment and peculiarities of food upon the habits of animals and plants. Because a few starved specimens of *A. obliquata* had not the strength to form a cocoon, the author is led into random hypotheses upon the derivation of Lepidoptera, whence "after many hours of toil" he has "been enabled to construct" a genealogical tree.

* 263. H. K. MORRISON. Notes on the Noctuidæ, with Descriptions of certain New Species. p. 55-71.

Describes *Charadra decora*, *Agrotis dilucida*, *Mamestra thecata*, *Onconemis Meadiana*, *Mamestra rufula*, *Actinotia derupta*, *Hadena suffusca*, *H. inordinata*, *H. stipata*, *H. paginata*, *Laphygma inflexa*, *Orthosia perpura*, *O. differta*, *Schinia Tepperi*, *Heliothis lucens*, *Tarache patula*, *T. crustaria*, *Lithacodia penita*, = 18 n. spp.; describes *Agrotis brocha*, *A. plagigera*, *A. redimicula*, *A. Rileyana*, *A. gladiaria*, *Schinia gracilentia* var. *oleagina* n. var.; notes on *Agrotis badicollis*, *A. unimacula*, *Orthosia ferrugineoides*, *Remigia texana*.

* 264. The **Amer. Nat.** [see Rec., Nos. 44-63], vol. viii, from p. 385, contains the following, and Nos. 265 to 289.

a. Notice of Edwards' The Butterflies of North America, second series part i (1874), p. 420-421; of Grote's List of the Noctuidæ of North America (1874) [separate; see Rec., No. 203], p. 421-422; of Scudder's On the Carboniferous Myriopods preserved in the Sigillarian Stumps of Nova Scotia [Memoirs Bost. Soc. Nat. Hist., vol. ii, p. 231-239] (1873), p. 430-

431; of *Psyche*, No. 1 (1874), p. 447; of Loew's Monographs of the Diptera of North America, vol. iii (1873) [and of vols. i, ii, iv], p. 497-498; of a new volume of Lacordaire's Genera of Coleoptera (1874?), p. 576; of Lintner's Entomological Contributions, No. iii [see Rec., No. 26; figures of larvæ of *Coelodasys unicornis*, *Platyserwa furcilla*, *Nalata gibbosa*, *Notodonta* sp., *Cerura borealis*, *Diptera deridens*, and imagos of *Cucullia Speyeri* ♂ ♀] (1874), p. 691-692, fig. 101-109; of Kraatz's "Monstrosities among Beetles" ["Berl. Entom. Zeitschr., vol. xvii"] (1873), p. 693. *b.* A remarkable Beetle Parasite of the Beaver [description and figure of *Platypssylla castoris*; its affinities], p. 427-428, fig. 82. *c.* Resolve of the New York State Legislature to promote the publication of Asa Fitch's Reports on Insects, p. 446-447. *d.* Ravages of locusts in Minnesota and Iowa, pp. 447, 511; use of locusts as food, p. 511. *e.* Notice of the death of G. A. Herrich-Schaeffer, p. 447; of G. R. Crotch, p. 512. *f.* Improvements in Insect Mounting [preservation in balsam of specimens for microscopic use], p. 507-508. *g.* Dimorphism in Gall Flies [*Cynips q. operator*], p. 563. *h.* Ichneumon parasites of Anthrenus larvæ, p. 564-565. *i.* Larvæ of Membracis [*Umbonia indicator*] serving as milk cattle to a bee [*Trigona cagafogo*], p. 565. *j.* List of papers read in Section B, at the Hartford meeting (Aug. 1874) of the American Association for the Advancement of Science, p. 573-574. *k.* An economical substitute for sheet cork (by Egbert Bagg, Jr.), p. 704. *l.* Importance of a re-survey of the State of Massachusetts, [resp. insects *et al.*], p. 762-764.

* 265. J. L. LECONTE. The Classification of the Rhynchoporous Coleoptera. p. 385-396, p. 452-470.

Sketch of the classifications of Schönherr (1833-1844), of Lacordaire (1863), of Jekel (1864), of Suffrian (1840-1848), of Thomson (1865), of Horn (1873); proposal and definition of a new classification; remarks upon the series and families and some of the lesser groups in the new classification.

* 266. A. S. PACKARD, JR. The Discovery of the Origin of the Sting of the Bee. p. 431.

Claim of priority of discovery.

* 267. A. S. PACKARD, JR. The Mouth Parts of the Dragon Fly. p. 432.

Notice of an article entitled * Zur Morphologie der Orthoptera amphibiotica, in the * Festschrift zur Feier des hundertjährigen Bestehens der Gesellschaft Naturforschender Freunde zu Berlin. Berlin, Dümmler, 1873. 4to. [In this article, p. 65-66, fig. 28, 29, is described *Pteronarcys frigida* n. sp., from Labrador.]

* 268. SANBORN TENNEY. On some of the Evidences of Life in Great Salt Lake. p. 435-436.

Finding of *Ephydra* sp. and other animals on the shore.

* 269. *Nature*, June 4. Charles Robert Darwin. p. 473-479.

Brief biographical sketch, with list of writings: to which is appended a biographical notice by Asa Gray.

* 270. A. S. PACKARD, Jr. Occurrence of *Japyx* in the United States. p. 501-502, fig. 91.

Finding of *Japyx subterraneus* n. sp. and *Scolopendrella americana* in Kentucky; description and figure of the former.

* 271. A. S. PACKARD, Jr. The "Hateful" Grasshopper in New England. p. 502.

Finding of *Caloptenus spreus* in Maine and Massachusetts; its characters and variations.

* 272. Dr. G. LINNECUM. The Agricultural Ant. p. 513-517.

Habits of *Myrmica molefaciens*.

* 273. A. R. GROTE. On the Antennæ in the Lepidoptera. p. 519-520.

Function of the antennæ. [See Rec., No. 69.]

* 274. Prof. P. J. VAN BENEDEEN. The Social Life of the Lower Animals. p. 521-530.

The trades and occupations, the parasitism, commensalism and mutualism of insects and other animals.

* 275. A. S. PACKARD, Jr. On the Distribution and Primitive Number of Spiracles in Insects. p. 531-534.

Upon which and how many segments spiracles are found in the different orders of insects.

* 276. *Fritz Müller* and CHARLES DARWIN. Recent Researches on Termites and Stingless Honey-bees. p. 553-556.

Reprint from "Nature" of a translation of a letter from Fritz Müller upon the discovery of two sexually mature forms of Termites, their habits and anatomy; and upon the habits and affinities of *Melipona* and *Trigona* as compared with *Apis*.

* 277. A. R. GROTE. The Cotton Worm. p. 562.

Habits of *Aletia argillacea*.

* 278. A. S. PACKARD, Jr. Larvæ of *Anopthalmus* and *Adelops*. p. 562-563.

Description of the larvæ of *Anopthalmus Tellkampfi* and *Adelops hirtus*; habits of the former.

* 279. G. LINNECUM. Sweet Scented Ants. p. 564.

Mention of Texan ants which smelt sweetly when crushed.

- * 280. G. LINCECUM. Robber Ants. p. 564.

Evisceration of one species of ant by another, for the purpose of obtaining the sweet contents of the stomach.

- * 281. A. M. MAYER. Experiments on the supposed Auditory Apparatus of the Mosquito. p. 577-592, fig. 92.

[Reprint, with a few corrections by the author, of the article cited in this Record, No. 189. See also Rec., No. 55.]

- * 282. G. LINCECUM. The Gossamer Spider. p. 593-596.
Habits of an undetermined species of Arachnidae.

- * 283. Dr. August Weismann and A. S. PACKARD, Jr. The Metamorphosis of Flies. I. p. 603-612.

Translation of a chapter entitled "View of the Phenomena of Development," from Weismann's "The Development of Diptera" (1864). "Relates wholly to *Musca vomitoria*."

- * 284. Dr. Augustus Weismann. The Metamorphosis of Flies. II. p. 661-667.

Translation of the closing chapter in Weismann's "Die Entwicklung der Dipteren" (1864). The histologic and morphologic relation between the larva and pupa in Muscidae.

- * 285. C. V. RILEY. Insectivorous Plants. p. 684-687.

Abstract of the article cited in this Record, No. 143, c.

- * 286. A. Weismann. The Metamorphosis of Flies. III. p. 713-721.

Translation of the concluding chapter of Weismann's "Die Metamorphose der *Corethra plumicornis*" [etc.] (1866). The histologic and morphologic relation between the larva and pupa in *Corethra* compared with that in *Musca* [see Rec., No. 284], indicating two diametrically opposed forms of insect metamorphosis.

- * 287. A. R. GROTE. On the Cotton Worm of the Southern States (*Aletia argillacea* Hubner). p. 722-727.

Habits, seasons and synonymy of *A. argillacea*. [See Rec., No. 143, d.]

- * 288. J. M. MILLIGAN. *Yucca filamentosa*. p. 749-752.
Habits of *Pronuba yuccasella*.

- * 289. A. R. GROTE. Note on the Synonymy of *Telea Polyphemus*. p. 753-754.

Bibliognostic citations resp. *Telea Polyphemus* and *Bombyx Paphia*.

CATOCALA RELICTA AT NEWTONVILLE, MASS. On Sept. 20, 1875, I captured at Newtonville a good specimen of *Catocala relictata* ♂, at sugar; the first that I have captured in this locality.—*Roland Thaxter*.